SPORT & RECREATIONAL OPTICS

SIGHTING-IN, ADJUSTMENT AND GENERAL USE OF YOUR NEW BSA TARGET SCOPE

The windage and elevation adjustment of a riflescope is intended to allow for left-right and up-down adjustment of the reticle, to align the riflescope to the target. Although this is a standard feature of any riflescope, many consumers are not aware that it is common for the windage and elevation movement of a target scope to be less than that of a lower powered "hunting" scope. However these units are required to have no less than 15 MOA (Minute Of Angle, or approximately 1" at 100 yards; _____" at 50 yards, etc.) of adjustment in each direction, measured from the mechanical center, and are mechanically centered at the factory prior to shipping.

There may also be a small amount of travel in the knobs that will not affect any windage or elevation adjustment. This occurs when the scope has reached its maximum adjustment. Again, this is not uncommon in any riflescope design, but tends to be more pronounced in a high - powered riflescope with less windage and elevation range. It is not a defect or malfunction of in the scope.

With this in mind, the importance of precision in mounting the scope becomes clear. However, design differences between gun manufacturers and their respective models, or the common downward angle of many break-action airgun barrels, also create the potential for difficulty in scope alignment. Practically speaking, if sighting in at 100 yards and there is more than 15 inches of variation between the point of impact of the shots and the reticle upon first mounting the scope, the scope must be re-mounted. In these cases, it may become necessary to use an adjustable base or ring set in mounting these scopes.

All BSA Target Scopes have removable W/E turret knobs that can be reset to zero once the rifle has been sighted in. This feature allows the shooter to calculate how many "clicks" of adjustment are necessary from the zero setting when shooting at different distances or wind conditions, then quickly and accurately return to their original setting. The knobs can be reset as follows:

Three small screws (spaced equally around the top of the knob) secure the knob onto the internal post. Once the rifle has been zeroed at a particular distance (such as 100 yards) the screws can be backed out approximately _ turn each, the knob pulled straight off, (so as to not alter the actual setting of the scope), and the knob replaced with "0" setting on the indicator line of the turret drum. Keeping in mind that each click of to knob is equal to ___ MOA, and that this value is different at different distances (___ at 100 yards, ___" at 200 yards, and 1/16" at 50 yards, and so on), the shooter can calculate how many clicks are necessary to compensate for the new distance or wind deflection.

It is not uncommon for the image of a high magnification scope to be considered "dark" or "blurry" when being compared to that of a low powered riflescope.

The brightness and clarity of an image is directly related to several factors. One factor is the diameter of the objective lens: a larger diameter lens will allow more light to enter the optical system. Another factor is the magnification of the unit. As the magnification increases, the amount of available light decreases. For example, although the objective diameter of a 6x-24x44 mm riflescope is greater than that of a 3x-9x40 mm riflescope, (44 mm as compared to 40 mm), the magnification is significantly increased (6x-24 as compared to 3x-9x). This disproportionate variation in these two factors will result in the target scopes having an apparently darker overall image than the standard riflescope. This is not uncommon, and does not signify any malfunction in the optical system of this unit.

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The reticle used in BSA Target Scopes is a fine crosshair. At first glance, some shooters may believe that the reticle appears to be too small and difficult to acquire. However, when taking into consideration the broad range of distances at which these products are designed to be used (anywhere between 14 and 600 yards), it becomes apparent that a larger reticle would cover a great deal of the target at any distance over 200 yards.

Another factor that will occasionally make the reticle difficult to see is a mis-set eyebell. As outlined in the directions that were included with the riflescope, the eyebell can be easily adjusted to compensate for shooters in need of visual correction. However, if the eyebell is incorrectly set, the shooter must "force focus" or compensate his or her eye to focus on the reticle. In turn, in some conditions, such as low-light, cloudy or high-mirage days, the reticle becomes much more difficult, if not impossible to focus. To properly adjust the eyebell, refer to the FOCUSING section of your riflescope's instructions. And remember to be patient: your target scope is a high-powered precision optical instrument and must be focused carefully to allow the best view of both target and reticle.

WE HOPE THAT YOUR INCREASED UNDERSTANDING OF THE DESIGN AND CAPABILITIES OF TARGET-STYLE RIFLESCOPES WILL NOW ALLOW YOU MANY YEARS OF ENJOYMENT AND SATISFACTION WITH YOUR BSA PRODUCT. IF YOU SHOULD HAVE ANY QUESTIONS, PLEASE FEEL FREE TO DIRECT THEM TO THE ADDRESS AND PHONE NUMBER LISTED ON YOUR WARRANTY CARD.

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